

Claims

1. Earpiece for behind-the-ear (BTE) parts of hearing acoustics devices, by means of which a signal conductor, preferably a flexible one, that comes from the BTE device, such as a sound tube (28), can be positioned in the auditory canal, where the earpiece is individually adapted to the anatomy of the patient, and its part that provides the hold essentially has the shape of a clip, which follows the outer edge (36) of the cavum conchae (22) in an arc shape, at least in segments, characterized in that a shank (32) that follows the edge of the cavum conchae makes a transition, above the antitragus (30), into an angled traverse segment (34) that passes through the cavum conchae, which runs in the direction of the porus acusticus externus, and broadens to hold the signal conductor (42) at its end segment (40), which comes to rest in the upper region of the auditory canal (26).
2. Earpiece according to Claim 1, characterized in that the end segment (40) makes a transition to an auditory canal tab (44) that also comes to rest only in the top region of the auditory canal (26).
3. Earpiece according to Claim 2, characterized in that the auditory canal tab (44) has a bore (46) to hold the signal conductor (42).
4. Earpiece according to Claim 2 or 3, characterized in that the auditory canal tab (44) has a diameter that makes up only a fraction of the diameter of the auditory canal (26).
5. Earpiece according to one of Claims 1 to 4, characterized in that the shank (32) that follows the edge of the cavum conchae (322) runs beyond the angled location (370) for the

- traverse segment (334), along the anthelix (362), and forms another shank (364) there.
6. Earpiece according to Claim 5, characterized in that the additional shank is extended to a location behind the antitragus (330).
 7. Earpiece for behind-the-ear (BTE) parts of hearing acoustics devices, by means of which a signal conductor, preferably a flexible one, that comes from the BTE device, such as a sound tube (128), can be positioned in the auditory canal, where the earpiece, and particularly the part of it that provides the hold, is individually adapted to the anatomy of the patient, characterized in that the part (156) of the earpiece (120) that provides the hold is held in the cymba (50), countersunk and fitted, and carries a clip (160; 460; 560; 660) that passes over the edge (58; 458; 558; 658) of the external ear in the shape of an arc, the end of which clip forms the holder for the flexible signal conductor (128; 428; 528; 628).
 8. Earpiece according to Claim 7, characterized in that the clip (160) is broadened at the end and forms a sound tube eye (461; 561; 661).
 9. Earpiece according to Claim 7 or 8, characterized in that the main body (156) that provides the hold extends into the region of the crus anthelicis (54).
 10. Earpiece according to one of Claims 7 to 9, characterized in that the sound tube eye (461) is located directly above the incisura anterior (425), i.e. between the tragus (427) and the crus heliciis (424).

WO 01/95668

16

PCT/EP01/02656

11. Earpiece according to one of Claims 7 to 9, characterized in that the sound tube holder (561) is recessed between the incisura anterior (525) and the tragus (527), in the entrance region to the auditory canal.
12. Earpiece according to Claim 10, characterized in that the sound tube holder is formed by an auditory canal tab (644) arranged without making contact in the upper region of the auditory canal, which holder surrounds the sound tube (628) or an angled piece of the earpiece.
13. Earpiece according to Claim 11 or 12, characterized in that the sound tube holder (744) is stabilized by way of a support claw (780), which extends from the bottom of the sound tube holder (744) in the direction of the antitragus (730), molding itself against the concha (722).
14. Earpiece according to one of Claims 1 to 13, characterized by use with cochlear implant microphones or CI BTE processors, with BTE tinnitus systems, such as broad-band noise systems (maskers or soft maskers).

add all